

Practical Implementation of Process Mining at Large North American Financial Services Enterprises

Successful Business Cases

About David Whyte





Dave is a senior technology executive who has enjoyed a 30+ year career leading teams and delivering strategic solutions in the Financial Services industry to improve customer and employee experience. He has a strong foundation in technology and financial services and was recently SVP of Corporate Centre Technology at Canadian Imperial Bank of Commerce, leading teams accountable for Big Data, Agile@Scale, Robotic Process Automation and large scale business transformations in Finance, HR and Procurement.

Dave's teams have leveraged StereoLOGIC Process Mining and Diagnostics tool for several large scale business process transformations including a Retail Product Origination re-write across the entire branch network and several Robotic Process Automation initiatives.





- ✓ Automated Process Mining vs Manual Discovery
- ✓ How to practically implement Process Mining in a short time
- ✓ Successful case studies: *Process Mining at a Major Canadian Bank*

What is common between BPM, Transformation, RPA & Outsourcing?

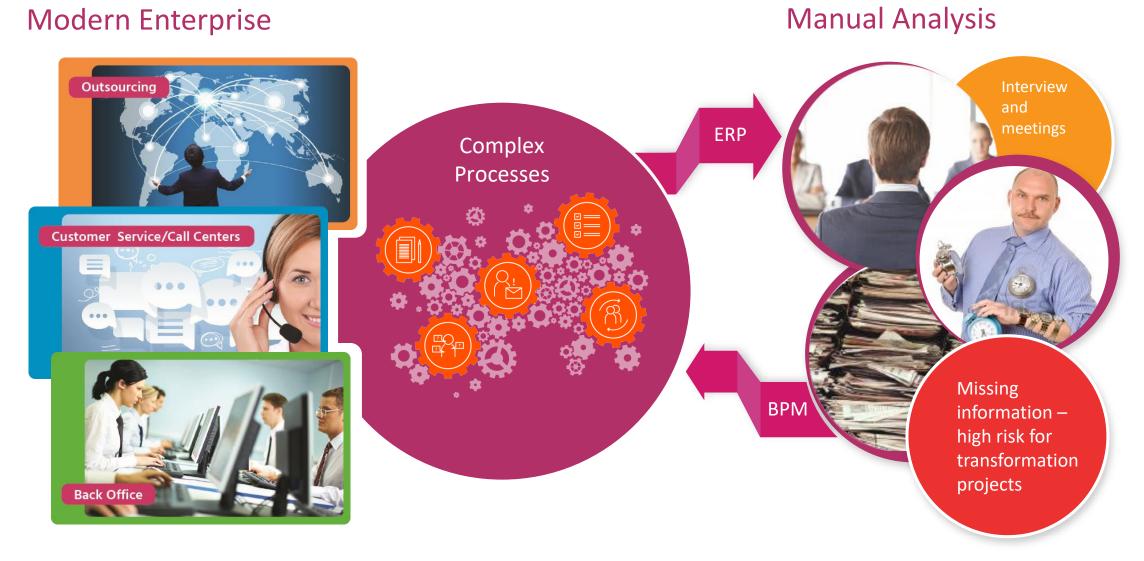


Modern Enterprise

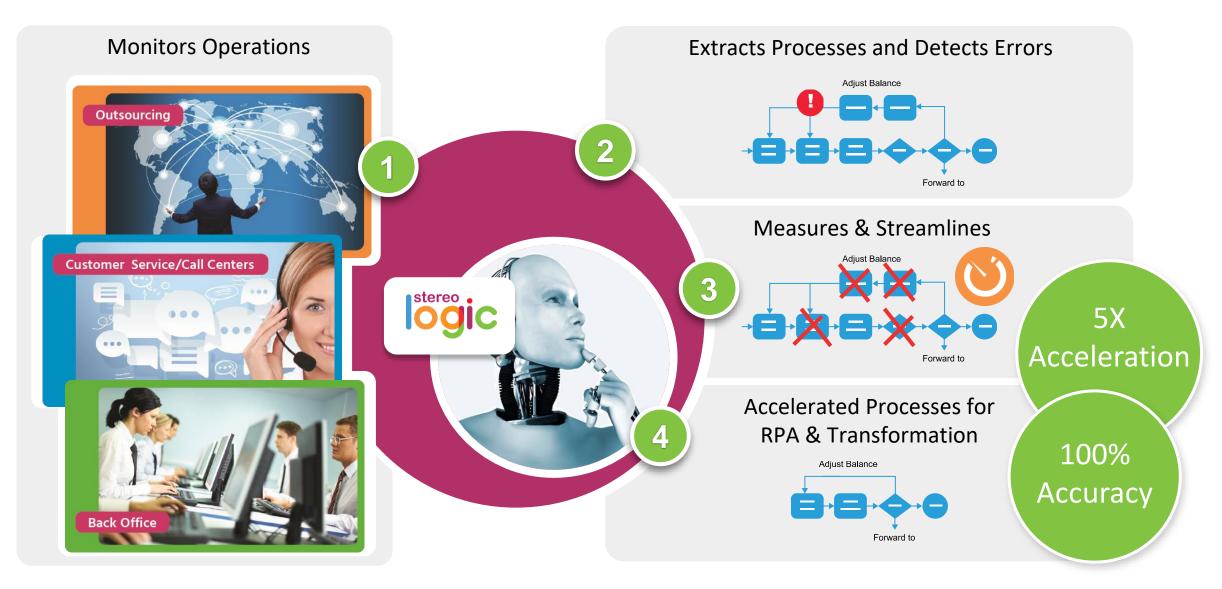


Manual Process Analysis





Automated Process Mining & Diagnostics





Case Study: Practical Implementation of Process Mining at Major Canadian Bank

Replacement of multiple legacy origination systems with one consolidated system



Challenge



Post-Transformation Stabilization

- Despite intensive testing and Branch Piloting of new Origination Platform, a number of errors and system delays arise in production
- Processes are not stabilized and employees waste time on workarounds and waiting for systems response this **negatively impacts customers experience**.

Solution



- In 2016 the Bank has introduced a new approach to improving customer and employee experience by implementing StereoLOGIC Process Analytics [®]
- StereoLOGIC has allowed to define standard processes and to detect process deviations and errors at branches in real time.





- Accelerated Customer Services by 22.5% and Reduced Errors and Delays by 95% in less than 6 months
- \$15MM operational savings across all branches

Senior Director, Technology and Operations:

"StereoLOGIC enables us to see what's actually going on in production"

The Challenge – What's going on?



Challenge



Post-Transformation Stabilization

- Despite intensive testing and Branch Piloting of new Origination Platform, a number of errors and system delays arise in production
- Processes are not stabilized and employees waste time on workarounds and waiting for systems response this **negatively impacts customers experience**.

	"Every FI is competing and needs to reduce cost at every opportunity"
What	"There are always differences between test and production, some real scenarios are hard to predict"
Project Leaders	"The financial advisor is focused on the client interaction and may not remember exactly what happened with the system"
Say:	"User's perception of the problem is often wrong, we need to prove / disprove user complaints – do we need to fix them?"

"It is always great to know exactly what is going on."

Solution





In 2016 the Bank introduced **StereoLOGIC Process Analytics**, which provided the ability to:

- Proactively and precisely detect problems (errors, delays and usability issues) in production, when new releases come out
- Improve the quality of what's being implemented by identifying issues early
- Accelerate national implementation
- Significantly improve and accelerate customer services
- Improve employee satisfaction

Results



- Accelerated Customer Services by 22.5% and Reduced Errors and Delays by 95% in less than 6 months
- \$15MM operational savings across all branches

The Approach



- Each new release of the Platform is piloted in a small number of selected branches (5 10) with using StereoLOGIC
 Process Analytics [®]
- Selected users (10 20 per branch) working on actual Client Cases are monitored and the time spent on specific process activities is measured
- All Errors and Delays that have occurred are automatically detected and reported
- Error and Delay Reproduction Scenarios are documented automatically
- Root cause analysis is performed by recreating the Reproduction Scenarios in the test environment
- The detailed information for the problem correction is provided, such as:
 - ✓ Detailed Process Flow
 - ✓ User Activity where the Error / Delay occurred
 - ✓ Time when it occurred
 - ✓ Screen transition response times
 - ✓ The step sequence between errors and process activities causing them
 - ✓ Screen for each User Activity
- The progress is reflected in daily reports and baselined for future use

RESULTS



\$15 M Annual

Savings

✓ Reduced Errors and Delays from 95% to 0%

Errors and Delays:	Client Time Saved (%)
User Errors	6.81 %
System Errors	2.02 %
Screen Delays	7.03 %
Canceled Cases	6.68 %
TOTAL:	22.5%

- ✓ Generated Standard Operating Procedures and Performance Metrics
- ✓ Accelerated Customer Services by 22.5%
- ✓ \$15 M Annual FTE Savings

Customer Service is accelerated by 22.5%.





Report Example: Number of Defects and Delays in Production



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Errors and Delays	- Details											
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londay, February, 22 2016	Version 1	00:56:57	00:55:07	6	1	2	9	62	26	00:14:12	26%	
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Report Example: Defect Reproduction and Root Cause Analysis

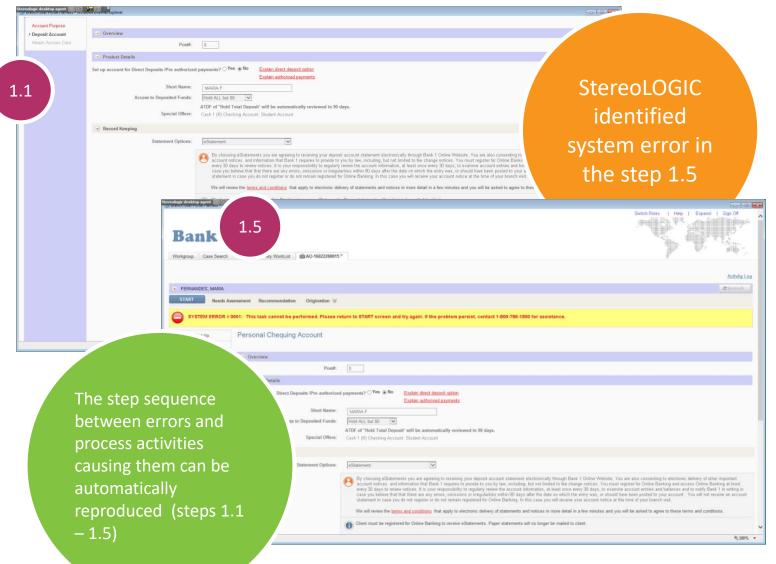
eFA6 First System Error. Basic Flow:

1.1 In Checking account click on Statement Options (see screen)
1.2 Select eStatement
1.3 Check Client Agreement Checkbox
1.4 Click Next (Complete Agreement)

1.5 SYSTEM ERROR (see screen)

Detailed error replay - flow with links to the screens to assist error reproduction

Additional technical info available: page URLs, session IDs, user events, etc.



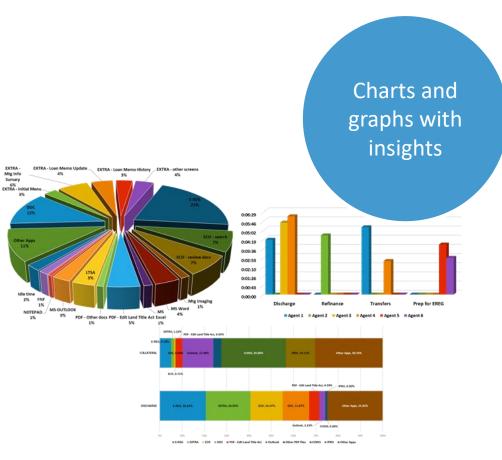
REPORTS and **INSIGHTS** (examples of deliverables)



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estigation would be required to conclude on volume of potential saving

TOTAL POTENTIAL SAVINGS



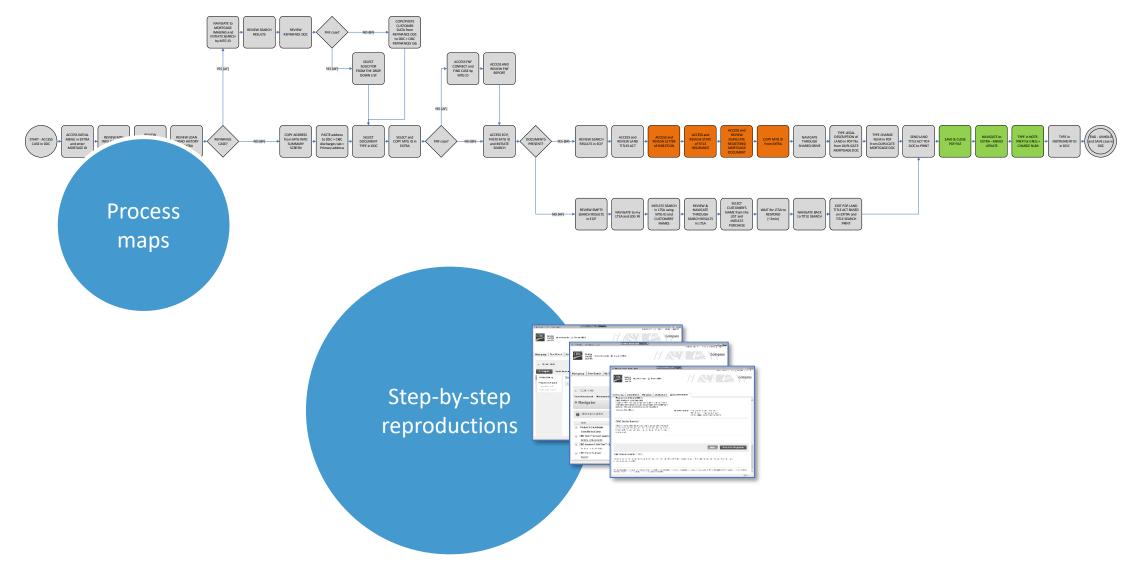
ntranet access add/modify/delete entifying available FIS IDs

37% of ALL agents' recorded work is spent in SERVICE NOW. Automation of any of the potential processes will have a significant saving effect here.

Other Observations

REPORTS and INSIGHTS (examples of deliverables)



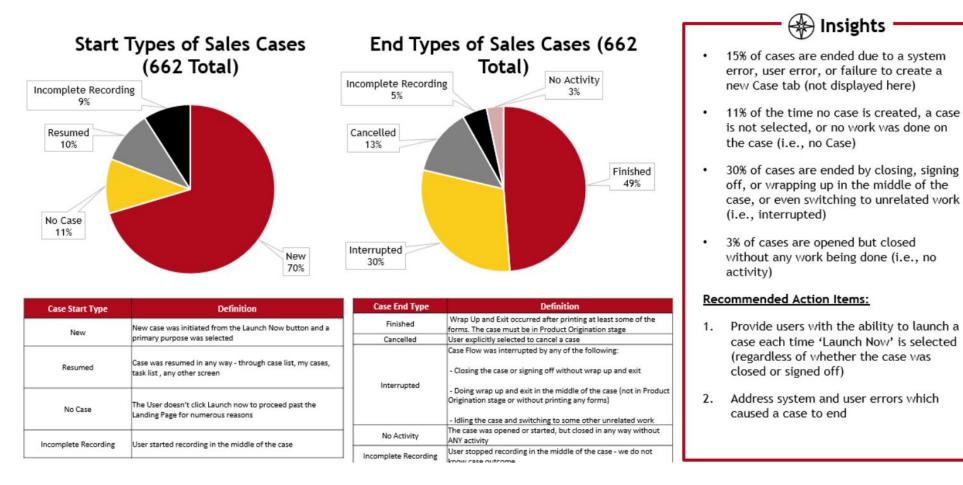


REPORTS and INSIGHTS



Sales Case Findings

662 Banking Centre Compass cases were analyzed to understand start and end types

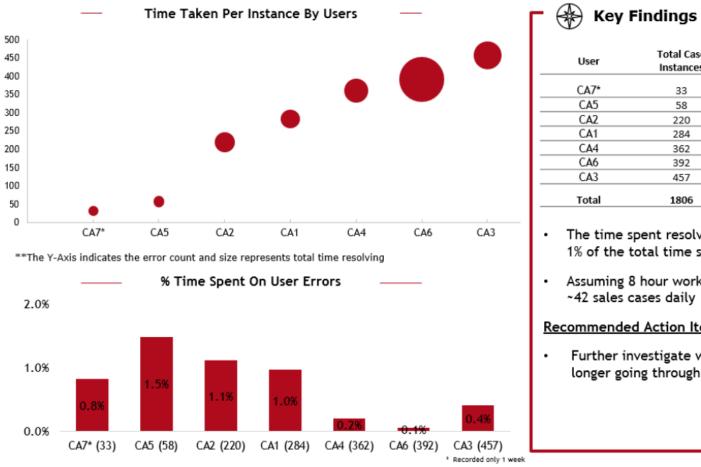


REPORTS and INSIGHTS



ນໍດິຈໍ Credit Adjudication Total Times Per User

CAs average 10 minutes to process a sales case of which 6 seconds is spent resolving errors



🛞 Key	Findings —			
User	Total Case Instances	Total Unique Sales Cases	Recording Time	Time Per Sales Case
CA7*	33	26	~6 hours	~14 min
CA5	58	46	~7.5 hours	~9.5 min
CA2	220	115	~25 hours	~13 min
CA1	284	220	~21 hours	~6 min
CA4	362	273	~34.5 hours	~7.5 min
CA6	392	259	~121.5 hours	~28 min
CA3	457	277	~47.5 hours	~10 min
Total	1806	1216	~263 hours	n/a

- The time spent resolving user errors is approximately 1% of the total time spent on cases
- Assuming 8 hour work days with lunch, CAs can process

Recommended Action Items:

Further investigate why some individuals seem to take longer going through cases than others



Thank you!

Process Mining Conference 2019

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